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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/776,735      | 02/11/2004  | Johann Jaeckel       | 588.1012            | 3627             |

23280 7590 02/08/2007  
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| EXAMINER |
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JOHNSON, VICKY A

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| ART UNIT | PAPER NUMBER |
|----------|--------------|

3682

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS                               | 02/08/2007 | PAPER         |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| <i><b>Office Action Summary</b></i> | <b>Application No.</b> | <b>Applicant(s)</b> |
|-------------------------------------|------------------------|---------------------|
|                                     | 10/776,735             | JAECKEL ET AL.      |
| Examiner                            | <b>Art Unit</b>        |                     |
| Vicky A. Johnson                    | 3682                   |                     |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1)  Responsive to communication(s) filed on \_\_\_\_.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

- 4)  Claim(s) 1-16 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-16 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 11 February 2004 is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1)  Notice of References Cited (PTO-892) 4)  Interview Summary (PTO-413)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date. \_\_\_\_.  
3)  Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.  
5)  Notice of Informal Patent Application  
6)  Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "46" has been used to designate both the outer radial region and the carrier in Fig 3; and in Fig 5 "41" is used to designate the spring. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

3. Claims 10 and 15 are objected to because of the following informalities: In claim 15 line 2 "carriers" should be --carrier--; claim 10 line 4 recites "being is". Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the second parts" in line 5. There is insufficient antecedent basis for this limitation in the claim.

In claims 1 and 8, it is unclear what the limitation "other regions" includes. It is also unclear what "on an outside" is referring to.

Claim 3 recites the limitation "the additional spring" in line 4. There is insufficient antecedent basis for this limitation in the claim.

In claims 8, 9, 10, and 15, it is unclear what the limitation "ring-like" includes.

In claim 8, it is unclear what the limitation "on the outside" is referring to.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 7-9, and 12-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Rohs et al (US 6,364,775).

Rohs et al disclose a torsional vibration damper comprising: a first part (1) and a second part (3) rotatable around an axis of rotation (see Fig 2), the first part being pivotable with respect to the second part (col. 1 lines 20-28); at least one energy accumulator (17, 18) compressible through pivoting of the first part with respect to the second part (see Fig 2), the energy accumulator acting around a circumference of the torsional vibration damper (see Fig 1), the energy accumulator having at least one spring (18) having end regions and an intermediate region between the end regions (see Fig 3); and a carrier (17) for receiving the spring, the carrier being pivotable with respect to the first and second parts (see Fig 3), the end regions of the spring being supported in the carrier so that the intermediate region remains contactless (see Fig 1), at least up to a limiting rotational speed (inherent).

Re claim 7, the first part (1) and second part (3) are dual -mass flywheel parts, the first part having an annular receiver (21) for the carrier, the carrier being at least limitedly pivotable inside the annular receiver (see Fig 1).

Re claim 8, the annular receiver is delimited by at least one ring-like wall region (5) overlapping the at least one carrier radially on the outside in the axial direction (see Fig 5).

Re claim 9, the carrier is radially supported on the ring-like wall region and is movable along the wall region at least under the effect of centrifugal force (see Fig 1).

Re claim 12, the annular receiver (21) has support regions (50) for supporting the carrier at least in a relative pivot direction between the first and second parts (see Fig3).

Re claim 13, the second part has impingement regions (unnumbered part of 3 contacting the inner surface of 17, see Fig 1) projecting into the annular receiver (21) for contacting the at least one spring received in the carrier (see Fig 1).

Re claim 14, the carrier (17) has free regions (inner region of 21) extending around the circumference (see Fig 1), impingement regions (see Fig 1) for the at least one spring received in the carrier capable of entering the free regions during a relative rotation of the first and second parts (see Fig 1).

Re claim 15, a second carrier (see Fig 1) connected (connected through the part 5) to the carrier (see Fig 1), the carrier and the second carrier being supported against centrifugal force by at least one ring component (60).

Re claim 16, the carrier and second carrier are diametrically opposed (see Fig 1).

8. Claims 1-12, 14, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Kühne (US 5,095,771).

Kühne discloses a torsional vibration damper comprising: a first part (1) and a second part (4) rotatable around an axis of rotation (see Fig 6), the first part being pivotable with respect to the second part (col. 3 lines 6-11); at least one energy accumulator (50) compressible through pivoting of the first part with respect to the second part (col. 5 lines 17-39), the energy accumulator acting around a circumference of the torsional vibration damper (see Fig 6), the energy accumulator having at least one spring (51) having end regions and an intermediate region between the end regions (see Fig 5); and a carrier (50) for receiving the spring, the carrier being pivotable with

respect to the first and second parts (see Fig 6), the end regions of the spring being supported in the carrier so that the intermediate region remains contactless (see Fig 5), at least up to a limiting rotational speed (inherent).

Re claim 2, the at least one spring includes at least two compression springs positioned one behind another in series (see Fig 5), the two compression springs being received in the carrier (see Fig 5), facing end regions of the springs located circumferentially in series being supported via at least one support element (52).

Re claim 3, a further spring (40) positioned outside the carrier, the at least one spring received in the carrier being operatively connected in series to the further spring positioned outside the carrier (see Fig 6), the further spring being compressible using support regions (unnumbered part, see Fig 5) provided on the carrier (see Fig 5).

Re claim 4, the further spring is supportable directly on the carrier (see Fig 5).

Re claim 5, an end of the further spring facing toward the carrier is connected to the carrier (see Fig 5).

Re claim 6, the further spring has an elongated shape and is formed by at least one helical spring (see Fig 6).

Re claim 7, the first part and second part are dual -mass flywheel parts (see Fig 1), the first part having an annular receiver (space between plates 2 and 3) for the carrier, the carrier being at least limitedly pivotable inside the annular receiver (see Fig 6).

Re claim 8, the annular receiver is delimited by at least one ring wall region (21b) overlapping the at least one carrier radially on the outside in the axial direction, the wall region thus defining at least partially the other regions.

Re claim 9, the carrier is radially supported on the ring-like wall region and is movable along the wall region at least under the effect of centrifugal force (see Fig 6).

Re claim 10, the further spring is supportable radially on the outside via at least one support element (unnumbered part, see Fig 5), the support element being positioned between the further spring and a ring wall region overlapping the further spring axially (see Fig 5), the support element being movable along the wall region when the further spring is compressed (see Fig 6).

Re claim 11, the at least one support element includes a plurality of support elements spaced apart from one another over a length of the further spring (see Fig 6).

Re claim 12, the annular receiver has support regions (unnumbered part, see Fig 5) for supporting the carrier at least in a relative pivot direction between the first and second parts.

Re claim 14, the carrier has free regions extending around the circumference (see Fig 5), impingement regions (52) for the at least one spring received in the carrier capable of entering the free regions during a relative rotation of the first and second parts (see Fig 5).

Re claim 15, a second carrier (50, see Fig 2) connected to the carrier (the entire device is connected together), the carrier and the second carrier being supported against centrifugal force by at least one ring component (outer rim of 3).

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

|              |              |                  |
|--------------|--------------|------------------|
| 5,289,737    | Kühne        | (friction shoes) |
| 6,113,496    | Oyama et al  | (carrier)        |
| 6,286,390    | Rohs et al   | (carrier)        |
| 6,223,625    | Ara et al    | (carrier)        |
| 6,131,487    | Jäckel et al | (springs)        |
| 6,712,706    | Jäckel et al | (friction shoes) |
| 4,904,225    | Worner et al | (carrier)        |
| 2002/0128074 | Jäckel et al | (friction shoes) |
| 2005/0070362 | Jäckel et al | (friction shoes) |
| 6,575,838    | Jäckel et al | (springs)        |

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vicky A. Johnson whose telephone number is (571) 272-7106. The examiner can normally be reached on Monday-Friday (7:00a-3:30p).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6217. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*V. Johnson* 2-507

Vicky A. Johnson  
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Art Unit 3682